

**MICHAEL A. SULZINSKI, Ph.D.**  
Department of Medical Education  
Geisinger Commonwealth School of Medicine  
Scranton, PA 18510

**PROFESSIONAL BACKGROUND:**

**Geisinger Commonwealth School of Medicine  
Scranton, PA**

Adjunct Associate Professor, Microbiology and Immunology (2008-2019)  
Professor, Microbiology and Immunology (2019 – Present)

Professor in Residence, Cancer Biology (2019 – Present)  
Geisinger Cancer Institute  
Danville, PA

**University of Scranton**

Assistant Professor of Biology, 1990-1995  
Associate Professor of Biology (Tenured), 1995 – 2001  
Professor of Biology, Program in Biochemistry, Cell and Molecular Biology (2001-2019)  
Professor Emeritus of Biology, Program in Biochemistry, Cell and Molecular Biology  
(2019- Present)

**Teaching Awards:**

- 2005 University of Scranton *CASE Professor of the Year Award*
- University of Scranton, Class of 2005, *Teacher of the Year Award*
- *Edward Gannon, S.J., Memorial Award for Teaching*,  
*Alpha Sigma Nu Jesuit Honor Society*, 2007

**Research:**

Developed a rapid, sensitive and specific real-time PCR diagnostic assay for the detection of *Burkholderia gladioli*, an opportunistic pathogen in patients with cystic fibrosis.

**Previous Professional Employment:**

Senior Research Scientist  
Roche Diagnostic Systems  
Hoffmann-La Roche, Inc.  
Nutley, New Jersey

March 1987-August 1990

Molecular Biologist  
Lederle Laboratories  
American Cyanamid Company  
Pearl River, New York

December 1984-March 1987

**EDUCATIONAL BACKGROUND**

**Cornell University, Ph.D. 1984**

**Major: Plant Pathology**

**Minor: Biochemistry & Molecular Biology**

Research: Thesis project included the molecular characterization of a new subgenomic mRNA of Tobacco Mosaic Virus (TMV). This polyribosome associated RNA was mapped on the TMV genome, and was shown to contain a large open reading frame encoding a protein.

Academic Honors:

Outstanding Teaching Award  
National Science Foundation Research Fellow  
Andrew Dickson White Fellow  
Kosciuszko Foundation Scholarship

**The Pennsylvania State University B.S. 1980**

**Major: Plant Science**

Research: Studied the role of an RNA-dependent RNA polymerase in healthy and virus-infected plants (Undergraduate Research Project)

Academic Honors:

Graduated with Highest Honors  
GPA 3.86; Highest in graduating class  
Named to Dean's List for all semesters  
Awarded the following scholarships:  
College of Agricultural Sciences Alumni Scholarship  
Eva B. and G. Weidman Groff Memorial Scholarship  
N. C. Harris Scholarship  
Edna R. Schwab Memorial Scholarship  
First Slovak Ladies' Association Scholarship  
Arthur Gaspari Scholarship

Bayard D. Kunkle Scholarship  
 Louise Carnegie Scholarship

## **REFEREED PUBLICATIONS**

- Sulzinski, M.A., M.A. Wasilewski, J.C. Farrell and D.L. Glick (2009). Undergraduate virology exercises demonstrate conventional and real-time PCR using commercially available HIV primers and non-infectious target. *Biochemistry and Molecular Biology Education* **37**, 232-235.
- Glick, D.L., C.M. Coffey and M.A. Sulzinski (2002). Simultaneous PCR detection of the two major bacterial pathogens of geranium. *J. Phytopathology* **150**, 54-59.
- Sulzinski, M.A. (2001). Differentiation of *Xanthomonas campestris* pvs. *pelargonii* and *hederae* by PCR. *J. Phytopathology* **149**, 45-49.
- Nameth, S.T., M.L. Daughtrey, G.W. Moorman and M.A. Sulzinski (1999). Bacterial blight of geranium: A history of diagnostic challenges. *Plant Disease* **83**, 204-212.
- Sulzinski, M.A., B. Schlagnhauser, G.W. Moorman and C.P. Romaine (1998). PCR-based detection of artificial latent infections of geranium by *Xanthomonas campestris* pv. *pelargonii*. *J. Phytopathology* **146**, 111-114.
- Sulzinski, M.A., G.W. Moorman, B. Schlagnhauser and C.P. Romaine (1997). A simple DNA extraction method for PCR-based detection of *Xanthomonas campestris* pv. *pelargonii* in geraniums. *J. Phytopathology* **145**, 213-215.
- Sulzinski, M.A., G.W. Moorman, B. Schlagnhauser and C. P. Romaine (1996). Characteristics of a PCR-based assay for *in planta* detection of *Xanthomonas campestris* pv. *pelargonii*. *J. Phytopathology* **144**, 393-398.
- Sulzinski, M.A., G.W. Moorman, B. Schlagnhauser and C. P. Romaine (1995). Fingerprinting of *Xanthomonas campestris* pv. *pelargonii* and related pathovars using random-primed PCR. *J. Phytopathology* **143**, 429-433.
- Sulzinski, M.A. and L. M. Cimasky. (1995). Leaf bisection for the enzymatic isolation of mesophyll protoplasts from *Saintpaulia ionantha*. *Biologia plantarum* **37**, 297-300.
- Sulzinski, M. A., D. D. Jurkonie and C. S. Adonizio. (1994). Tobacco mosaic virus subliminal infection of *Saintpaulia ionantha*. *Journal of the American Society for Horticultural Science* **119**, 702-705.
- Sulzinski, M. A. (1992). Tobacco mosaic virus: A safe introduction to Virology. *The Science Teacher* **59**, 42-45.

- Sulzinski, M.A., K. Gabard, P. Palukaitis and M. Zaitlin. (1985). Replication of tobacco mosaic virus. VIII. Characterization of a third subgenomic TMV RNA. *Virology* **145**, 132-140.
- Palukaitis, P.F., F. Garcia-Arenal, M.A. Sulzinski and M. Zaitlin. (1983). Replication of tobacco mosaic virus. VII. Further characterization of single- and double-stranded virus-related RNAs from TMV infected plants. *Virology* **131**, 533-545.
- Zaitlin, M., P. Palukaitis, F. Garcia-Arenal and M.A. Sulzinski. (1983). The characterization of single- and double-stranded sub-genomic RNAs from tobacco mosaic virus infected plants. In *Plant Infectious Agents* (ed. H.D. Robertson, S.H. Howell, M. Zaitlin and R.L. Malmberg), pp. 69-72, Cold Spring Harbor Laboratory, Cold Spring Harbor, NY.
- Sulzinski, M.A. and M. Zaitlin. (1982). Tobacco mosaic virus replication in resistant and susceptible plants: In some resistant species virus is confined to a small number of initially infected cells. *Virology* **121**, 12-19.

### **TECHNICAL PATENTS**

- Romaine, C.P., G.W. Moorman and M.A. Sulzinski (1999). A polymerase chain reaction based diagnostic test for detection of *Xanthomonas campestris* pv. *pelargonii*. United States Patent 5,863,731.
- Longiaru, M., S. R. Silver and M. A. Sulzinski (1998). Primers and kits for the detection of *Chlamydia trachomatis*. European patent EP 0 875 583 A2.
- Longiaru, M., S. R. Silver and M. A. Sulzinski (1998). Biotin-labelled DNA by polymerase chain reaction and detection thereof. Australian patent AU-A-61894/98.
- Longiaru, M., S. R. Silver and M. A. Sulzinski (1998). Diagnostic kit for detecting nucleic acid from *Chlamydia trachomatis*. Norway patent 302204.
- Longiaru, M., S. R. Silver and M. A. Sulzinski (1998) Primers and probes for *Chlamydia trachomatis*. Australian patent AU-B-72804/94.
- Sulzinski, M.A., S. R. Silver and M. Longiaru (1998). Primers and kits for the detection of *Chlamydia trachomatis*. European Patent EP0875583 A 19981104.
- Longiaru, M., S. R. Silver and M. A. Sulzinski. (1993). Detection of *Chlamydia trachomatis* by polymerase chain reaction using biotin-labelled DNA primers and capture probes. United States Patent 5,232,829.
- Sulzinski, M.A., M. Longiaru and S.R. Silver (1991). Biotin-labelled DNA by polymerase chain reaction and detection thereof. European patent EP0420260.

Twelve related international patents issued 1991-1999:

AU723602  
 ES2140372T  
 BR9004881  
 DE69033387T  
 ZA9007706  
 DE69033387D  
 AT187499T  
 AU685144  
 NZ247522  
 NZ235463  
 CA2026280  
 AU6329090

**Presentations at scientific meetings** (Name of presenter is underlined).

Scott, S.A. and M. A. Sulzinski (2014). Detection of commensal populations of *Burkholderia gladioli* as a potential reservoir for human infections. Presentation to the National Meeting of the American Society for Microbiology, Boston, MA (May 2014)

D.L. Glick, C. Gushue, H. Namdari, M. Wasilewski and M. Sulzinski. Development of a Quantitative Real-Time PCR assay for *Burkholderia gladioli*. Presentation to the 2009 Annual Meeting of the American Society for Microbiology, Philadelphia, PA. (May 2009).

M. A. Sulzinski and C. Giannetti (2004). Distribution of *Xanthomonas campestris* pv. *pelargonii* after leaf surface inoculation of geranium. Presentation to the National Meeting of the American Society of Plant Biologists. Orlando, FL.

Coffey, C.M. and M.A. Sulzinski (2001). Microtiter plate detection of PCR-amplified *Xanthomonas campestris* pv. *pelargonii* DNA. 2001 Annual Meeting of the American Society for Microbiology, Orlando, FL.

Glick, D.L. and M.A. Sulzinski (2000). Triplex PCR for bacterial pathogens of geranium and for demonstration of amplification competence. 2000 Annual Meeting of the American Phytopathological Society, New Orleans, LA.

Glick, D.L. and M.A. Sulzinski (2000). Simultaneous PCR detection of the two major bacterial pathogens of geranium. 2000 Annual Meeting of the American Society for Microbiology, Los Angeles, CA.

Sulzinski, M.A. and S.H. Kim. (1999). Differentiation of *Xanthomonas campestris* pvs. *pelargonii* and *hederiae* by PCR. 1999 Annual Meeting of the American Phytopathological Society, Montreal, Canada.

- Sulzinski, M.A., K.M. Teufel and C.P. Romaine (1998). Early multiplication and distribution of *Xanthomonas campestris* pv. *pelargonii* in inoculated geraniums. 1998 Annual Meeting of the American Phytopathological Society, Las Vegas, NV.
- Sulzinski, M. A., B. Schlagnhauer, G. W. Moorman and C. P. Romaine (1997). PCR-based detection of occult infections by *Xanthomonas campestris* pathovar *pelargonii* in geranium. 1997 Annual Meeting of the American Phytopathological Society, Rochester, NY.
- Sulzinski, M.A., C. P. Romaine, K. Kelly and M. Tiffany (1997). PCR-based assay to detect *Xanthomonas campestris* pathovar *pelargonii*. Invited workshop on rapid diagnostic assays for plant pathogens. 1997 Annual Meeting of the American Phytopathological Society, Rochester, NY.
- Sulzinski, M. A., G.W. Moorman, B. Schlagnhauer and C. P. Romaine (1996). Characteristics of a PCR-based assay for *Xanthomonas campestris* pathovar *pelargonii*. 1996 Meeting of the Northeastern Division Meeting, American Phytopathological Society, Long Branch, NJ.
- Sulzinski, M. A., G.W. Moorman, B. Schlagnhauer and C. P. Romaine (1994). Detection of *Xanthomonas campestris* pathovar *pelargonii* by hybridization-specific PCR. 1994 Meeting of the Northeastern Division Meeting, American Phytopathological Society, Ithaca, NY.
- Sulzinski, M. A., G.W. Moorman and C. P. Romaine. (1993). Detection and differentiation of *Xanthomonas campestris* pathovars by polymerase chain reaction. 1993 Annual Meeting of the American Phytopathological Society, Nashville, TN.
- Sulzinski, M. A., D. D. Jurkonie and C. S. Adonizio. (1992). Subliminal infection of *Saintpaulia ionantha* by tobacco mosaic virus. 1992 Annual Meeting of the American Phytopathological Society, Portland, OR.
- Adonizio, C.S., G.J. Negvesky, D. D. Jurkonie and M.A. Sulzinski. (1992). Characterization of the virus-host interaction between tobacco mosaic virus and *Saintpaulia ionantha*. 1992 Meeting of the Pennsylvania Academy of Science, Mount Pocono, PA.
- Spadoro, J., M.A. Sulzinski, A. Butcher, S. Kinard, C. Hanson and M. Longiaru. (1991). Detection and differentiation of HTLV-I and -II DNA in clinical specimens using PCR and a rapid, non-radioactive microtiter plate assay. Fourth Annual International Conference on Human Retrovirology, Montego Bay, Jamaica.
- Sulzinski, M.A., S. Silver, D. Casareale, R. Pottathil and M. Longiaru. (1990). A novel, rapid, colorimetric format for the detection of PCR amplified HTLV-I DNA. Paper presented at the Third Annual International Conference on Human Retrovirology, Maui, HI.

- Sulzinski, M.A. (1990). Polymerase chain reaction for detection of HIV and other viral pathogens. Invited presentation to Metropolitan New York Section of the American Association for Clinical Chemistry, held at New York City Department of Public Health, NY.
- Sulzinski, M.A., S. Silver, A. E. Koopman, A. D. Barone and M. Longiaru. (1990). Microtiter plate capture and detection of biotinylated PCR products by oligonucleotide probes. Paper presented at the Annual meeting of the American Society for Microbiology, Anaheim, CA.
- Sninsky, J.J., S. Kwok, K. Young, and M. Sulzinski. (1990). Polymerase Chain Reaction: State of the Art. Invited workshop at 6<sup>th</sup> Annual Clinical Virology Symposium, Pan American Society for Clinical Virology, Clearwater, FL.
- Longiaru, M., S. Silver, A.D. Barone, D. Pawlyk and M.A. Sulzinski. (1990). The use of PCR and a colorimetric microtitre plate assay format for the detection and differentiation of HTLV-I and -II DNA. Paper presented at the Sixth International Conference on AIDS, San Francisco, CA.
- Sulzinski, M. A., M. R. Wilson, A. Chan, and T. R. Ubertini. (1985). Partial sequence characterization of excreted poliovirus RNA after primary administration of oral poliovirus vaccine. Paper presented at the 1985 Meeting on Modern Approaches to Vaccines, Cold Spring Harbor Laboratory, Cold Spring Harbor, NY.
- Sulzinski, M. A., P. Palukaitis and M. Zaitlin. (1984). Partial characterization of a newly-discovered TMV sub-genomic RNA. Paper presented at the Annual meeting of the American Society for Virology, University of Wisconsin, Madison.
- Sulzinski, M. A., P. Palukaitis, K. Gabard and M. Zaitlin. (1984). Characterization of a third TMV sub-genomic mRNA. Paper presented at the Sixth International Congress of Virology, Banff, Canada.
- Sulzinski, M. A., P. Palukaitis, F. Garcia-Arenal and M. Zaitlin. (1983). A re-examination of sub-genomic TMV-RNAs. Paper presented at the Annual meeting of the American Society for Virology, Michigan State University, East Lansing, MI.
- Sulzinski, M. A. and M. Zaitlin. (1982). Tobacco mosaic virus replication in Subliminally infected plants. Paper presented at the Annual meeting of the American Society for Virology, Cornell University, Ithaca, NY.
- Sulzinski, M. A. and M. Zaitlin. (1981). Tobacco mosaic virus is confined to those few initially infected cells resulting from mechanical inoculation of cowpea leaves. Paper presented at the Northeastern Division Meeting of the American Phytopathological Society, Swan Lake, NY.

#### **Professional Memberships**

American Society for Microbiology  
American Society for Virology